STATEMENT OF BASIS

as required by LAC 33:IX.3109, for draft **Louisiana Pollutant Discharge Elimination System Permit No. LA0032352; AI 98804; PER20080001** to discharge to waters of the **State of Louisiana** as per LAC 33:IX.2311.

The **permitting authority** for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

I. **THE APPLICANT IS:** Town of Abita Springs
Abita Springs Sewer Treatment Plant
P.O. Box 461
Abita Springs, LA 70420

II. **PREPARED BY:** Angela Marse

DATE PREPARED: May 19, 2009

III. **PERMIT ACTION:** reissue LPDES permit LA0032352, AI 98804; PER20080001

LPDES application received: December 22, 2008

LPDES permit issued: March 1, 2004
LPDES permit expired: February 28, 2009

IV. **FACILITY INFORMATION:**

A. The application is for the discharge of treated sanitary wastewater from a publicly owned treatment works serving the Town of Abita Springs.

B. The permit application does not indicate the receipt of industrial wastewater.

C. The facility is located at the west end of Orme Street in Abita Springs, St. Tammany Parish.

D. The treatment facility consists of an activated sludge aeration basin followed by a circular clarifier. Disinfection is by chlorination.

E. Outfall 001

Discharge Location: Latitude 30° 28' 14" North
Longitude 90° 2' 50" West

Description: treated sanitary wastewater

Design Capacity: 0.4 MGD*

*See letter and updated application pages dated April 14, 2009.

Type of Flow Measurement which the facility is currently using:
Continuous Recorder

V. RECEIVING WATERS:

The discharge is into an unnamed ditch, thence into the Abita River, thence into the Bogue Falaya River in segment 040804 of the Lake Ponchartrain Basin. This segment is listed on the 303(d) list of impaired waterbodies.

The designated uses and degree of support for Segment 040804 of the Lake Ponchartrain Basin are as indicated in the table below[1/]:

Overall Degree of Support for Segment 040804	Degree of Support of Each Use						
Partial	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture
	Not Supported	Full	Not Supported	N/A	N/A	N/A	N/A

[1/]The designated uses and degree of support for Segment 040804 of the Lake Ponchartrain Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Water Quality Inventory Integrated Report, Appendix A, respectively.

Section 303 (d) of the Clean Water Act, as amended by the Water Quality Act of 1987 and EPA's regulations at 40 CFR 130, requires that each state identify those waters within its boundaries not meeting water quality standards. The Clean Water Act further requires states to implement plans to address impairments. LDEQ is developing Total Maximum Daily Loadings Studies (TMDLs) to address impaired waterbodies. Segment 040804 of the Lake Pontchartrain Basin is on the 2006 Integrated 303(d) List of Impaired Waterbodies. The suspected causes of impairment are mercury, chlorides, and pathogens. To date no TMDLs have been completed for this waterbody. A reopener clause has been included in the permit should the TMDLs require effluent limitations be placed in the permit. Suspected causes of concern are addressed in a manner consistent with the Department's permitting guidance for implementing Louisiana's surface water quality standards as follows:

Mercury
The named waterbody in segment 040804, the Bogue Falaya River (from headwaters to the Tchefunte River) is impaired for mercury. The source of mercury has been identified as atmospheric deposition. The discharge is into the Abita River, a tributary of the Tchefuncte River. A review of the application indicates a few commercial users (dentists, medical clinics, etc.) that could potentially contribute to the receiving waterbody's mercury impairment. For these reasons, the City of Abita Springs will be required to develop a Mercury Minimization Program Plan (MMPP). Should the TMDL for mercury determine a mercury effluent limitation is necessary; a reopener clause has been included in the draft permit. Data collected from monitoring required by the MMPP may help the Town evaluate compliance with any final mercury TMDL.

Chlorides
Chlorides are a suspected cause of impairment. Although the impairment is not attributed to sanitary wastewater according to the 305(b) List, sanitary treatment plants can potentially contribute to this impairment. A TMDL will determine if effluent limitations are required of sanitary wastewater treatment plants. A reporting and monitoring requirement for chlorides has been included in the permit. Data collected from the monitoring may be used by LDEQ TMDL modelers to determine any possible contribution to the impairment. The facility can also use data to evaluate compliance with any final chloride TMDL.

Pathogen Indicators
Monitoring for fecal coliform is the best indicator for the potential presence of pathogenic organisms in wastewater. To protect against potential receiving water impairments due to pathogens, fecal coliform limits have been established in the permit. Permit limits are reflective of water quality standards for primary contact recreation, a designated use of the receiving stream.

VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 040804 of the Lake Ponchartrain Basin, has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the *Gulf Sturgeon*, which is listed as a threatened/endangered species. This draft permit has been sent to the FWS for review as set forth in the Memorandum of Understanding between the LDEQ and the FWS. LDEQ has determined that the issuance of the LPDES permit is not likely to have an adverse affect upon the *Gulf Sturgeon* since effluent limitations are established in the permit to ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

VII. HISTORIC SITES:

The discharge is from an existing facility location, which does not include an expansion beyond the existing perimeter. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the 'Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits' no consultation with the Louisiana State Historic Preservation Officer is required.

VIII. PUBLIC NOTICE:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice published in:

Local newspaper of general circulation
Office of Environmental Services Public Notice Mailing List

For additional information, contact:

Mrs. Angela Marse
Water Permits Division
Department of Environmental Quality
Office of Environmental Services
P. O. Box 4313
Baton Rouge, Louisiana 70821-4313

IX. PROPOSED PERMIT LIMITS:

Final Effluent Limits

The facility will be increasing its design capacity from 0.3 MGD to 0.4 MGD.

Louisiana has an EPA approved antidegradation policy found at LAC 33.IX:1109. The policy states that no lowering of water quality will be allowed in waters where standards for the designated water uses are not currently being attained. The policy further states the administrative authority will not approve any wastewater discharge or certify any activity for federal permit that would impair water quality or use of state waters. Waste discharges must comply with applicable state and federal laws for the attainment of water quality goals. Any new, existing, or expanding point source or nonpoint source discharging into waters of the state,...will be required to provide the necessary level of treatment to protect state waters.

Segment 040804, the Bogue Falaya River (from headwaters to the Tchefuncte River), is designated for primary contact recreation, secondary contact recreation, and the propagation of fish and wildlife. Segment 040804 is designated a scenic from the confluence of the East and West Prong to La. Hwy. 437, north of Covington. The Abita River is not designated as an ONRW nor is it part of a national or state wildlife refuge. At present, the subsegment does not meet the designated use of propagation for fish and wildlife since it is impaired for chlorides and mercury (2006 303(d) List) due to atmospheric deposition and drought related impacts. Although sanitary treatment plants are not a suspected source of impairment, chlorides and mercury are addressed in the permit. Chlorides monitoring is required by the permit. A Mercury Minimization Program Plan is also required by the permit to reduce the introduction of mercury into the collection system and treatment works. The subsegment does not meet the primary contact recreation use since it is impaired for pathogens due to decentralized wastewater treatment plants and permitted smaller flow discharges. The permit contains fecal coliform effluent limits set at the standard for primary contact recreation. By meeting permit limits set at State water quality standards, no further degradation of the receiving waterbody should occur from this discharge.

In addition, a review of DMRs indicates the facility can provide the necessary level of treatment to protect state waters and meet permit limits. Failure to meet permit limits will subject the facility to enforcement actions.

OUTFALL 001

Final limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
$CBOD_5$	33	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP)/St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
TSS	50	15 mg/l	23 mg/l	Since there is no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
Ammonia-Nitrogen	17	5 mg/l	10 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy(SSELP)/St. Tammany Parish Areawide Policy for facilities of this treatment type and size.
Chlorides	N/A	---	Report mg/l	Best professional judgement based on receiving waterbody impairments.

Other Effluent Limitations:

1) **Fecal Coliform**

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5., the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

2) **pH**

According to LAC 33:IX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

4) Total Residual Chlorine

If chlorination is used to achieve the limitations on Fecal Coliform Bacteria, the effluent shall contain NO MEASURABLE Total Residual Chlorine (TRC) after disinfection and prior to disposal. Given the current constraints pertaining to chlorine analytical methods, NO MEASURABLE will be defined as less than 0.1 mg/l of chlorine. The TRC shall be monitored daily by grab sample.

X. PREVIOUS PERMITS:

LPDES Permit No. LA0032352: Issued: March 1, 2004
Expired: February 28, 2009

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Monthly Avg.	Weekly Avg.	Measurement Frequency	Sample Type
Flow	Report	Report	Continuous	Recorder
$CBOD_5$	10 mg/l	15 mg/l	2/month	Grab
TSS	15 mg/l	23 mg/l	2/month	Grab
Ammonia-Nitrogen	5 mg/l	10 mg/l	2/month	Grab
TRC	no measurable		1/week	Grab
Fecal Coliform Colonies	200	400	2/month	Grab
pH	---	---	2/month	Grab

The permit contains biomonitoring.
The permit contains pollution prevention language.

XI. ENFORCEMENT AND SURVEILLANCE ACTIONS:

A) Inspections

A review of the files indicates the following inspections were performed for this facility.

Date: February 27, 2007
Inspector: David Oge'
Findings and/or Violations:
1. A Compliance Evaluation Inspection was conducted at the facility. The plant was operating satisfactorily.
2. Adams Professional Wastewater Service is contracted to operate the plant. Acculab is the contract laboratory.

The facility was inspected in response to Hurricane Gustave in September, 2008. The facility had no damage and was operating.

B) Compliance and/or Administrative Orders

A review of the files indicates no recent enforcement actions administered against this facility.

C) DMR Review

A review of the discharge monitoring reports for the period beginning January, 2007 through December, 2008 has revealed the following violations:

Parameter	Outfall	Period of Excursion	Permit Limit	Reported Quantity
Fecal coliform	001	9/2008	200	257
Fecal coliform	001	8/2008	400	11000
Fecal coliform	001	6/2008	200	292
Fecal coliform	001	6/2008	400	727
Fecal coliform	001	9/2007	200	1470
Fecal coliform	001	9/2007	400	60000
Fecal coliform	001	8/2007	200	361
Fecal coliform	001	8/2007	400	13000
Fecal coliform	001	6/2007	200	232
Fecal coliform	001	6/2007	400	1000

*Because of effluent violations in the above table, the Facility has been referred to the Office of Environmental Compliance.

XII. ADDITIONAL INFORMATION:

The Louisiana Department of Environmental Quality (LDEQ) reserves the right to impose more stringent discharge limitations and/or additional restrictions in the future to maintain the water quality integrity and the designated uses of the receiving water bodies based upon additional water quality studies and/or TMDL's. The LDEQ also reserves the right to modify or revoke and reissue this permit based upon any changes to established TMDL's for this discharge, or to accommodate for pollutant trading provisions in approved TMDL watersheds as requested by the permittee and/or as necessary to achieve compliance with water quality standards. Therefore, prior to upgrading or expanding this facility, the permittee should contact the Department to determine the status of the work being done to establish future effluent limitations and additional permit conditions.

In accordance with LAC 33:IX.2903., this permit may be modified, or alternatively, revoked and reissued, to comply with any applicable effluent standard or limitations issued or approved under sections 301(b)(2)(c) and (D); 304(b)(2); and 307(a)(2) of the Clean Water Act, if the effluent standard or limitations so issued or approved:

a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or

b) Controls any pollutant not limited in the permit; or

c) Requires reassessment due to change in 303(d) status of waterbody; or

d) Incorporates the results of any total maximum daily load allocation, which may be approved for the receiving water body.

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.4 MGD.

Effluent loadings are calculated using the following example:

CBOD: 8.34 lb/gal x 0.4 MGD x 10 mg/l = 33lb/day

At present, the **Monitoring Requirements, Sample Types, and Frequency of Sampling** as shown in the permit are standard for facilities of flows between **0.1** and **0.5** MGD.

Pretreatment Requirements
Based upon consultation with LDEQ pretreatment personnel, standard pretreatment language has been included in the permit.

Mercury Minimization Plan
The permittee shall develop and implement a Mercury Minimization Program Plan within one year of the effective date of this permit. The plan shall be submitted to the Office of Environmental Compliance at PO Box 4312, Baton Rouge, LA 70821-4312. The plan may be formatted in accordance with the attached LDEQ Mercury Minimization Program Guidance Document, February 2007. Yearly thereafter, the permittee shall submit an annual report to the LDEQ, Office of Environmental Compliance at the above address. The annual report may be formatted in accordance with the attached LDEQ Mercury Minimization Program Guidance Document, February 2007, Appendix C.

Pollution Prevention Requirements
The permittee shall institute or continue programs directed towards pollution prevention. The permittee shall institute or continue programs to improve the operating efficiency and extend the useful life of the facility. The permittee will complete an annual Environmental Audit Report **each year** for the life of this permit according to the schedule below. The permittee will accomplish this requirement by completing an Environmental Audit Form which has been attached to the permit. All other requirements of the Municipal Wastewater Pollution Prevention Program are contained in Part II of the permit.

The audit evaluation period is as follows:

Audit Period Begins	Audit Period Ends	Audit Report Completion Date
Effective Date of Permit	12 Months from Audit Period Beginning Date	3 Months from Audit Period Ending Date

XIII. TENTATIVE DETERMINATION:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharge described in this Statement of Basis.

XIV. REFERENCES:

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 8, "Wasteload Allocations / Total Maximum Daily Loads and Effluent Limitations Policy," Louisiana Department of Environmental Quality, 2005.

Louisiana Water Quality Management Plan / Continuing Planning Process, Vol. 5, "Water Quality Inventory Section 305(b) Report," Louisiana Department of Environmental Quality, 2006.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards," Louisiana Department of Environmental Quality, 2008.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Subpart 2 - "The LPDES Program," Louisiana Department of Environmental Quality, 2008.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

Index to Surface Water Data in Louisiana, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

LPDES Permit Application to Discharge Wastewater, Town of Abita Springs, Abita Springs Sewer Treatment Plant, December 22, 2008.